

Title (en)
IMMOLATIVE CELL-PENETRATING COMPLEXES FOR NUCLEIC ACID DELIVERY TO THE LUNG

Title (de)
IMMOLATIVE ZELLPENETRIERENDE KOMPLEXE ZUR NUKLEINSÄUREABGABE AN DIE LUNGE

Title (fr)
COMPLEXES DE PÉNÉTRATION CELLULAIRE IMMOLATEURS POUR L'ADMINISTRATION D'ACIDES NUCLÉIQUES AU POUMON

Publication
EP 3917574 A4 20221102 (EN)

Application
EP 20747817 A 20200131

Priority
• US 201962800406 P 20190201
• US 2020016281 W 20200131

Abstract (en)
[origin: WO2020160511A1] There are provided herein, inter alia, complexes, compositions and methods for the delivery of therapeutic, diagnostic and imaging agents, including nucleic acid, into a cell. The complexes, compositions and methods may facilitate complexation, protection, delivery and release of oligonucleotides and polyanionic cargos into lung cells and lung tissue, both in vitro and in vivo.

IPC 8 full level
A61K 45/08 (2006.01); **A61K 47/00** (2006.01); **C08G 73/02** (2006.01); **C12N 11/00** (2006.01); **C12N 11/02** (2006.01)

CPC (source: EP IL KR US)
A61K 9/007 (2013.01 - IL US); **A61K 47/549** (2017.08 - US); **A61K 47/593** (2017.08 - EP IL KR US); **A61K 47/6935** (2017.08 - EP IL KR); **A61K 48/0041** (2013.01 - IL KR US); **A61K 48/0075** (2013.01 - KR); **C08G 63/08** (2013.01 - US); **C08G 63/64** (2013.01 - US); **C08G 63/685** (2013.01 - US); **C08G 73/028** (2013.01 - EP); **C08G 73/0293** (2013.01 - EP); **C12N 15/88** (2013.01 - EP IL KR); **A61K 9/007** (2013.01 - EP); **A61K 48/0041** (2013.01 - EP); **C08G 73/028** (2013.01 - US); **C08G 73/0293** (2013.01 - US)

Citation (search report)
• [I] US 2018028688 A1 20180201 - WAYMOUTH ROBERT M [US], et al
• [A] US 2014350077 A1 20141127 - COOLEY CHRISTINA BARNES [US], et al
• [A] US 2003185788 A1 20031002 - ROTHBARD JONATHAN B [US], et al
• [A] COLIN J. MCKINLAY ET AL: "Charge-altering releasable transporters (CARTs) for the delivery and release of mRNA in living animals", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 114, no. 4, 9 January 2017 (2017-01-09), pages E448 - E456, XP055674219, ISSN: 0027-8424, DOI: 10.1073/pnas.1614193114
• [A] E. I. GEIHE ET AL: "Designed guanidinium-rich amphipathic oligocarbonate molecular transporters complex, deliver and release siRNA in cells", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 109, no. 33, 14 August 2012 (2012-08-14), pages 13171 - 13176, XP055350121, ISSN: 0027-8424, DOI: 10.1073/pnas.1211361109
• See also references of WO 2020160511A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2020160511 A1 20200806; AU 2020215613 A1 20210819; CA 3128476 A1 20200806; CN 113811334 A 20211217; CN 113811334 B 20240220; CN 118079011 A 20240528; EP 3917574 A1 20211208; EP 3917574 A4 20221102; IL 285206 A 20210930; JP 2022523324 A 20220422; KR 20210134651 A 20211110; US 11931416 B2 20240319; US 2022143199 A1 20220512

DOCDB simple family (application)
US 2020016281 W 20200131; AU 2020215613 A 20200131; CA 3128476 A 20200131; CN 202080021440 A 20200131; CN 202410206234 A 20200131; EP 20747817 A 20200131; IL 28520621 A 20210728; JP 2021544558 A 20200131; KR 20217028008 A 20200131; US 202017427362 A 20200131